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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,442	07/31/2001	Ronald S. Cok	82947THC	4214

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EXAMINER	
RAO, SHRINIVAS H	

ART UNIT	PAPER NUMBER
2814	

DATE MAILED: 08/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/919,442	COK, RONALD S.	
	Examiner	Art Unit	
	Steven H. Rao	2814	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 May 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Response to Amendment

Applicants' amendment filed on May 09, 2003 has been entered on May 15, 2003.

Therefore claims 2-11 as amended by the amendment and claim 1 as originally filed are currently pending in the Application.

Drawings

New corrected drawings are required in this application because the reasons listed on the PTO-948 mailed with previous Office Action.

Applicants' have not responded to the drawing corrections.

. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings.

The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 to 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Salam (U.S. Patent No. 6,081,073 herein after Salam). (the previous rejection is reproduced below for the ready reference for response to Applicants' arguments see "response to arguments section" below).

With respect to claim 1, Salam describes a light emitting flat-panel display comprising : a plurality of light emitting diodes (Salam figs. 1 and 2, col. 2 lines 62-63). a sensor for sensing the light output of at least one of the light emitting diodes to produce a light output signal (Salam figs. 1 and 2 # 21, col. 3 lines 50-61) and a display controller responsive to the light output signal for producing a signal representing the remaining useful life of the display . (Salam col.11 lines 30-55,. Col. 1 lines 19-21, col. 1 lines 43-45).

With respect to claim 2, wherein the controller includes means for comparing the light output signal to a predetermined criterion to determine the remaining useful of the display. (Salam col. 3 lines 35-40, col. 4 lines 20-24, lines 38-40, lines 47-51).

With respect to claims 3 and 4, wherein the display is a color display having groups of differently colored light emitting diodes and further comprising a separate sensor for each group in the flat panel display and wherein there is a different pre-determined criterion for each group. (Salam col. 11 lines 19-23 – different colors and col. 4 lines 52 to col. 5 lines 45-sensor).

With respect to claims 5 and 6 wherein the light emitting diodes, the sensor and the controller are integrated on a common substrate. (Salam figs. 1 and 2).

With respect to claim 7, Salam describes an addressable memory wherein the display further comprises an addressable memory connected to the controller and wherein the signal representing the remaining useful life of the display is stored in the memory and accessible external to display. (Salam col. 3 lines 10-30, col. 4 lines 40-42,).

With respect to claim 8, where in the controller includes the means for generating an interrupt signal when the remaining useful life of the display is less than a pre-determined criterion for communication to a device external to the display. (Salam col. 11 lines 53-55 col. 11 line 67).

With respect to claim 9, wherein the signal representing the remaining useful life of the display has a range of values corresponding to the expected life-time of the display. (col. 11 lines 50-55 It is an inherent characteristic of the signal in order to produce the signal representing the remaining useful life of the display to have a range of values corresponding to the expected life –time of the display).

With respect to claim 10, wherein the signal representing the remaining useful life of the display is a binary value representing whether or not the display has reached the end of useful life. (It is an inherent characteristic of the signal in order to produce the signal representing the remaining useful life of the display to

have a binary value corresponding to the expected life –time of the display which is to be displayed in units of time namely hours/minutes and seconds).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Salam (U.S. Patent No. 6,081,073 herein after Salam) as applied to claims 1-10 above and further in view of Mizoguchi (U.S. Patent No. 6,028,327 herein after Mizoguchi).

With respect to claim 11, wherein the diodes are organic light emitting diodes.

Salam does not specifically describe organic light emitting diodes.

However Mizoguchi in Abstract line 1 describes organic light emitting diodes to provide a device wherein low ac(alternating current) voltage may be applied to emitting layer.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute Mizoguchi's organic light emitting diodes for Salam's unspecified diodes in Slam's device. The motivation to make the above substitution is to provide a device wherein low ac (alternating current) voltage may be applied to emitting layer. (Mizoguchi col. 4-7).

Response to Arguments

Applicant's arguments filed 05/09/2003 have been fully considered but they are not persuasive. for the following reasons :

Applicants' arguments that the Salam reference does not teach or suggest a controller that produces a signal representing the remaining useful life of the display as claimed by the Applicant is not persuasive because it is noted that the recited step of , " produces a signal representing the remaining useful life of the display " is taken to be a recitation with respect to the manner in which a claimed apparatus is intended to employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. (ex parte Masham , 2 USPQ 2d 1647 (1987).

Assuming arguendo, the recited limitation is limiting (as also stated in the previous Office Action mailed on 4/11/2003) Salam in col.11 lines 43-46 states :

> the dynamic color correction factor Z_{reg}. As a bonus, the system can in this case detect degradation in a lamp without rerpriming. The system compares I_m with I_p and if it is found that

Further Salam in col. 1 lines 19-21 states:

> sity at unit current, and on the operating current. Also LEDs are subject to intensity degradation, i.e. fading, with prolonged use.

col.1 lines 43-44 state :

> by 3.2:1. Added to this are variations in intensity degradation with time, and variations due to the differences in the

Further it is well known that LEDs usually have their useful life stated on it (or its package, similar to the life of an electric bulb wherein the life is given as e.g. 70 hours) and therefore when compared to the detected degradation in the device one can determine the remaining useful life i.e. a signal representing the remaining useful life (i.e. intensity degradation by prolonged use, based upon time) is shown by the display which represents the remaining useful life .

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Steven H. Rao whose telephone number is (703) 306-5945. The examiner can normally be reached on Monday- Friday from approximately 7:00 a.m. to 5:30 p.m.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956. The Group facsimile number is (703) 308-7724.

Steven H. Rao

Patent Examiner

March 20, 2003.

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